

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 G11B20/18 G11B27/30 G11B27/36

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G11B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC, IBM-TDB, COMPENDEX

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 01/031651 A (SEAGATE TECHNOLOGY LLC) 3 May 2001 (2001-05-03) the whole document	1-9
Y	US 6 223 303 B1 (BILLINGS RUSSELL A ET AL) 24 April 2001 (2001-04-24) the whole document	1-9
A	US 5 216 655 A (HEARN PATRICK ET AL) 1 June 1993 (1993-06-01) abstract column 1, line 62 - column 2, line 14 -/--	1,6-9

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- * & * document member of the same patent family

Date of the actual completion of the international search

29 December 2003

Date of mailing of the international search report

08/01/2004

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INTERNATIONAL SEARCH REPORT

Internat Application No
PCT/ 3/04172

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 541 219 A (IBM) 12 May 1993 (1993-05-12) abstract column 2, line 35 - line 57 column 5, line 5 - line 43 column 8, line 39 - column 9, line 10 -----	1,6-9
A	US 6 279 089 B1 (SWATOSH TIMOTHY W ET AL) 21 August 2001 (2001-08-21) abstract column 1, line 41 - line 56 column 6, line 6 - column 7, line 3 -----	1,2,6-9

INTERNATIONAL SEARCH REPORT

Internat. Application No
PCT/ 3/04172

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
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